



Gesture


Gesture received little attention from linguists and other language researchers before about 1990

Why?

- Researchers assumed → "Gestures are messy, not rule-based"
- "Spoken languages is more basic, more important"

Since then, language researchers have been actively studying the form and meaning of gestures and the contexts in which they occur

They have made many valuable discoveries



Who gestures?


Politicians do.



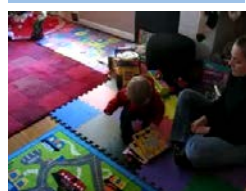

Who gestures?

Babies do.

This baby is doing **lip pointing**, a type of pointing that is found in many cultures



This other baby is doing many gestures along with adult spoken language

Who gestures?

Everybody does.



IMPORTANT: Gesture vs. Signed language

Gestures are different from signs

Signed language is a system of communication that functions as a real language on its own right

It has a syntax (gesture doesn't)

It has a lexicon (gesture doesn't)

It is rule-based (gesture is not)

Etc.

Do signers gesture? Yes.

Important:

Some gestures occur with speech and some do not

Co-speech gestures

Gestures that occur with speech

They often add important information to what is being stated



Some basic ways to produce gestures

1. Manual gestures
2. Body gestures
3. Facial gestures

Manual gestures

Using hands to communicate

Examples

1. Your friend enters a crowded theater. You see her looking around for a seat. When she sees you, you tap the seat next to you with your hand.

2. You tell your friend, "I rolled down the hill", and while you say it, you make a rolling gesture with your hand



Body gestures not just hands

Using a body movement to communicate

Examples:

Clark and Gerrig (1990)

Person says, "When I was getting out of the car, demonstrate bumping head on the top of the car]..."

Your friend is talking about a party, and says, "I was totally [demonstrates bending over and vomiting]..."

Facial gestures

Some obvious ones:

Smile, frown

Others, what do these mean?

Scrunching up nose...

Opening eyes wide...

What are some others?



How are gestures learned?

We don't know all the details, many questions to explore, including:

Do babies "babble" with physical movements BEFORE they learn to gesture?



What we DO know:

Kids notice subtle social cues and want to help others
= having a social role is important to them

Gesture is part of this

Video: Baby humans will help others with physical actions



Research on pointing

Babies learn to point very early
They learn to extend hand and arm toward objects to **draw attention to things in the world**

Adults also point at things, including things that are no longer there or that refer to metaphorical things in the world, like days, ideas, etc.



Pointing

Human pointing is useful to dogs



Emblematic gestures

Gestures that stand for a particular thing, like "ok"
Conventional, can be quoted (repeated and understood)
BUT they can vary a lot from culture to culture
These are also called "symbolic" gestures

Gesture researchers are not especially interested in these
BUT everyday people tend to think of THESE when you mention the word "gesture"



Emblematic gestures



Gesture cultural differences?

Gestures vary from culture to culture

Easy to misread a gesture or produce the wrong gesture in a new/different culture – can get you in trouble

One misconception is that “some cultures don’t really have much gesture” (Japanese) and “some have a LOT” (Italians)

From the film “Inglorious Basterds”



From the film “Inglorious Basterds”



Germans and Americans have different ways of making a gesture to represent the number “3”

Gestures in Italy

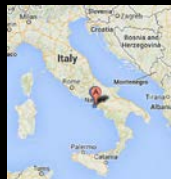


Stereotype: “Italians gesture a lot”

Is this true? Adam Kendon says

No, but they appear to have more emblematic gestures

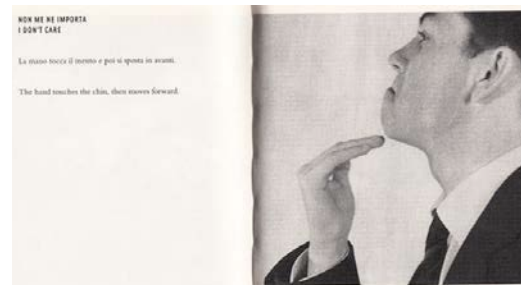
No, but they DO seem to have a larger gesture space



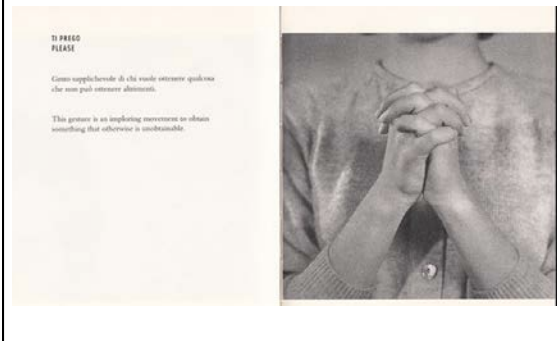
Kendon (2004: 349-354)

Kendon, A. (2004). *Gesture: Visible Action as Utterance*. Cambridge, UK: Cambridge University Press.

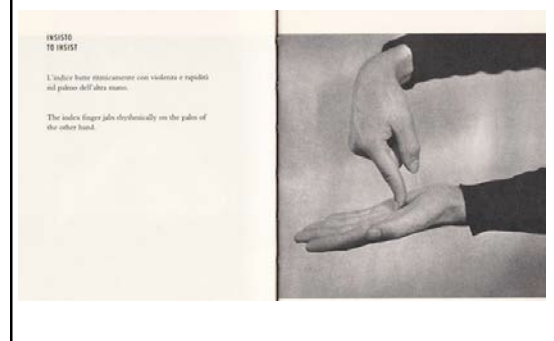
Italian gestures



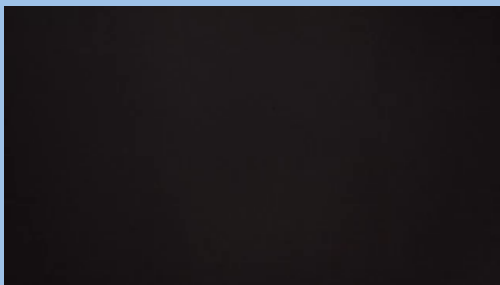
Italian gestures



Italian gestures



History of Italian Gestures



Who benefits from gesture?

Different views of gesture over the decades

Who benefits?

1. Nobody.

Gestures communicate nothing useful to the listener.

This view has little support these days.



Who benefits?

2. Listener.

Gestures communicate something to listener, but they are pretty random and not well-coordinated with speech.



Who benefits?

3. Listener.

Gestures help the listener understand messages, and they are well-coordinated with speech (not random).



Who benefits?

4. Speaker.

Gestures help the speaker produce a meaningful, coherent message.



Who benefits?

5. Both.

Gestures help both the speaker and the listener communicate.



Some research on gesture

The reading for today: **Why people gesture when they speak**
Nature article by Iverson and Meadows

The study examined 12 blind and 12 sighted children (average 11.5)
Children did a reasoning task

All kids gestured while speaking/doing the task
All kids used similar gestures → example: iconic gesture to show pouring
Blind people still gestured even when they thought the person they were talking to was blind

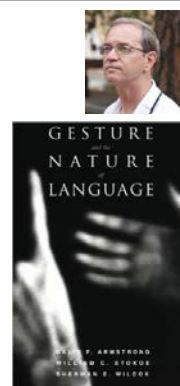
Different hypotheses:

1. Do people learn to gesture because they SEE others gesturing?
OR
 2. Do they simply learn/know that seeing a gesture helps listeners understand?
OR
 3. Is gestures just somehow important so the speaking process?
- THEIR DATA SEEMED TO SUPPORT THE HYPOTHESIS 3. **Blind people still gestured with blind interlocutors**

Why do we gesture?

According to Sherman Wilcox, we gesture a lot because gestures evolved in human communication BEFORE spoken language did

On this view, spoken language evolved to disambiguate gesture communication





Adam Kendon

A father of modern gesture research
Many books and articles

"Far more than words are involved in communication"
"It makes communication more precise and complete"



Studied gesture in depth, characterized it in different forms, different contexts

Argued for the primacy of gesture in communication



Kendon, A. (2004). *Gesture: Visible Action as Utterance*. Cambridge, UK: Cambridge University Press.

David McNeill

Well-known gesture researcher, University of Chicago (retired)
Characterized gesture types and showed their importance
In everyday communication
Many books and articles



Susan Goldin Meadow

Well-known gesture researcher, University of Chicago
Discovered that gestures help with cognitive tasks, including solving math problems

Herbert Clark

Psycholinguist at Stanford University
Has a theory of **common ground**
People gesture (and talk) to build common ground (shared understanding) with another person

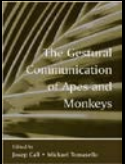




Michael Tomasello

Argued that humans gesture (and speak) because of **shared intentionality**, which includes shared knowledge of some outcome, some goal

Children learn to gesture (and speak) so they can become cooperating members of cultural groups

Has written many books and articles on communication, such as this one on gestures in apes and monkeys (2007)

Max Planck Institute for Evolutionary Anthropology


Observed that chimpanzees alter their gestures according to what outcome they expect

Gesture and the brain

neurological findings

Areas associated with spoken and signed language show activation with gesture

Shows that gesture plays a communicative function



Researchers focus on manual gestures

Production tasks

- Ask participants to re-tell a story or explain something
- Video-tape participants
- Later analyze their gestures (When? What kind? How?)

Comprehension tasks

- Show pictures or videos of gesturing and see how that influences language understanding

Discourse analysis

- Analyze archived video recordings

Research with TV News Archive

Internet Archives, non-profit company, San Francisco

- You can access countless hours of recorded news broadcasts
- You can search for certain phrases and words
- You can analyze the gestures that occur with them
- When does the gesture occur? Duration? What kind? How frequent?

Gesture phases

These are often analyzed
in gesture research

Three phases of manual gestures

- 1. Preparation**
get hand ready to gesture, start
- 2. Stroke**
the movement itself
- 3. Retraction**
ending the gesture

'Types

gestures have different jobs in communication

- Iconic** **Resembles what is being talked about**
do a circular movement to show somebody drove in a circle
do a pouring motion to show that you need more water
- Beats** **Marks time, keeps the conversation going**
do a few tiny up-down movements that have no meaning
- Deictic** **Pointing; draws attention to objects in the world; objects can be metaphorical, like an idea or a time**
point at a door nearby if asked where the restroom is
point at an empty chair if somebody is looking for a seat

Iconic gestures

"The idea was to walk across the crossing."
"I couldn't see the connection myself."



Iconic gestures

"We kind of drifted apart."



Beat gestures

"... he is the guy historically placed to give Lennon and McCartney a good deal at last"



Deictic gestures

"This is him."



Deictic gestures

"It was an American DJ so you guys are to blame ... not you personally"



Gestures can be metaphorical



or especially hear
the music, that music

And they can be ambiguous Metaphorical or not, for instance



"...American instinct that led these men and women to pick up the torch and **cross this bridge**"

"**that's the same instinct** that moved patriots to choose revolution over tyranny"

"It's the **same instinct** that drew immigrants **from across oceans** and the Rio Grande"

"It's the same instinct that **led women** to **reach for the ballot**"



Next time

No class on THURSDAY!

See you AFTER Spring break